

**FUTURE FISHERIES IMPROVEMENT PROGRAM
GRANT APPLICATION***(please fill in the highlighted areas)***I. APPLICANT INFORMATION**A. Applicant Name: David MoserB. Mailing Address: 1400 South 19th StreetC. City: Bozeman State: MT Zip: 59718-5496Telephone: (406)-994-6938 E-mail: davemoser@mt.govD. Contact Person: Same

Address if different from Applicant: _____

City: _____ State: _____ Zip: _____

Telephone: _____ E-mail: _____

E. Landowner and/or Lessee Name
(if other than Applicant): James and Beatrice TaylorMailing Address: 1045 Reeves Road, Ste ECity: Bozeman State: MT Zip: 59718Telephone: (406) 587-5594 E-mail: jim@wytana.com**II. PROJECT INFORMATION***A. Project Name: Bostwick Creek Fish BarrierRiver, stream, or lake: Bostwick CreekLocation: Township: T1S Range: R6E Section: 6
Latitude: 45.7806°N Longitude: -111.0239°W *within project (decimal degrees)*County: Gallatin

B. Purpose of Project:

Modify an existing weir structure to be a fish barrier and protect native Westslope Cutthroat Trout (WCT) population in Bostwick Creek from non-native fish species. The Gallatin River Drainage currently holds pure native WCT in less than 3% of historically occupied habitat. Projects such as these are the only measure that can ensure persistence of WCT in the presence of non-native trouts. This project has several advantages, 1) Construction of fish barriers are limited to locations with existing structures (i.e. culverts, weirs) or 2) in heavily incised stream channels

Brief Project Description:

C.

Bostwick Creek currently supports populations of brook trout, hybrid trout (WCT X RBT), and pure Westslope Cutthroat Trout. Remaining WCT are currently being displaced by Brook Trout and are hybridizing with Rainbow Trout. Two years ago pure WCT from Bostwick Creek were transferred to Placer Creek, a tributary to North Fork Spanish Creek (Gallatin). Bostwick Creek likely still holds a number of pure WCT.

After construction of the fish barrier we plan concentrated efforts – two removals per year for 2 to 3 years - to identify and re-locate pure fish whilst removing non-native brook trout and hybrids using intensive electrofishing. After removal of all fish in an approximately 3 mile stretch of stream, native WCT rescued from the population would be returned to their natal habitat.

D. Length of stream or size of lake that will be treated: 3 Miles

E. Project Budget:

Grant Request (Dollars): \$ \$58,520

Contribution by Applicant (Dollars): \$ \$5,000 In-kind \$
(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): \$ \$26,083.45 In-kind \$ \$3,727.55
(attach verification - See page 2 budget template)

Total Project Cost: \$ \$94,331.55

F. Attach itemized (line item) budget – see template

G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support and fish biologist support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

III. PROJECT BENEFITS*

A. What species of fish will benefit from this project?:

Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*)

B. How will the project protect or enhance wild fish habitat?:

Provide a barrier to upstream movement of competing and hybridizing species of trout

C. Will the project improve fish populations and/or fishing? To what extent?:

This project will provide a unique fishing opportunity for native WCT. Public access via USFS trail system is limited and from the north of private property. The primary goal of this project is to preserve native WCT; there will be an opportunity for anglers willing to hike to access these rare and important fish.

- D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

N/A

- E. The project agreement includes a 20-year maintenance commitment. If you are unable to meet this commitment, please explain why:

N/A

- F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

Invasion of non-native salmonids into the Bostwick Creek WCT population. The project will protect native WCT from upstream migration through construction of a fish barrier.

- G. What public benefits will be realized from this project?:

Preservation of a State species of special concern, prevention of listing of WCT as a threatened or endangered species, and preservation of the only trout species native to the Gallatin River drainage

- H. Will the project interfere with water or property rights of adjacent landowners? (explain):

No

- I. Will the project result in the development of commercial recreational use on the site?: (explain):

No

- J. Is this project associated with the reclamation of past mining activity?:

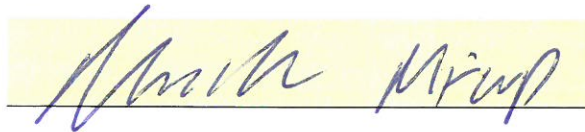
No

Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.

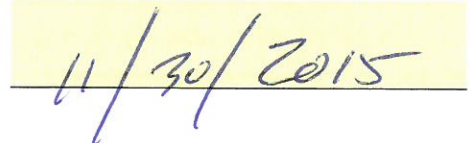
IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

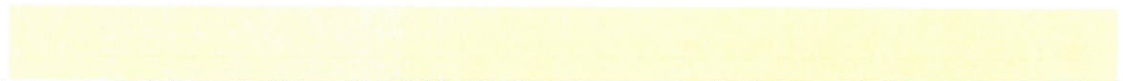
Applicant Signature:



Date:



Sponsor (if applicable):



***Highlighted boxes will automatically expand.**

**Mail To: Montana Fish, Wildlife & Parks
Habitat Protection Bureau
PO Box 200701
Helena, MT 59620-0701**

**E-mail To: Michelle McGree
mmcgree@mt.gov
(electronic submissions MUST be signed)**

**Incomplete or late applications will be returned to applicant.
Applications may be rejected if this form is modified.**

*****Applications may be submitted at anytime, but must be received by the Future Fisheries Program office in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.*****

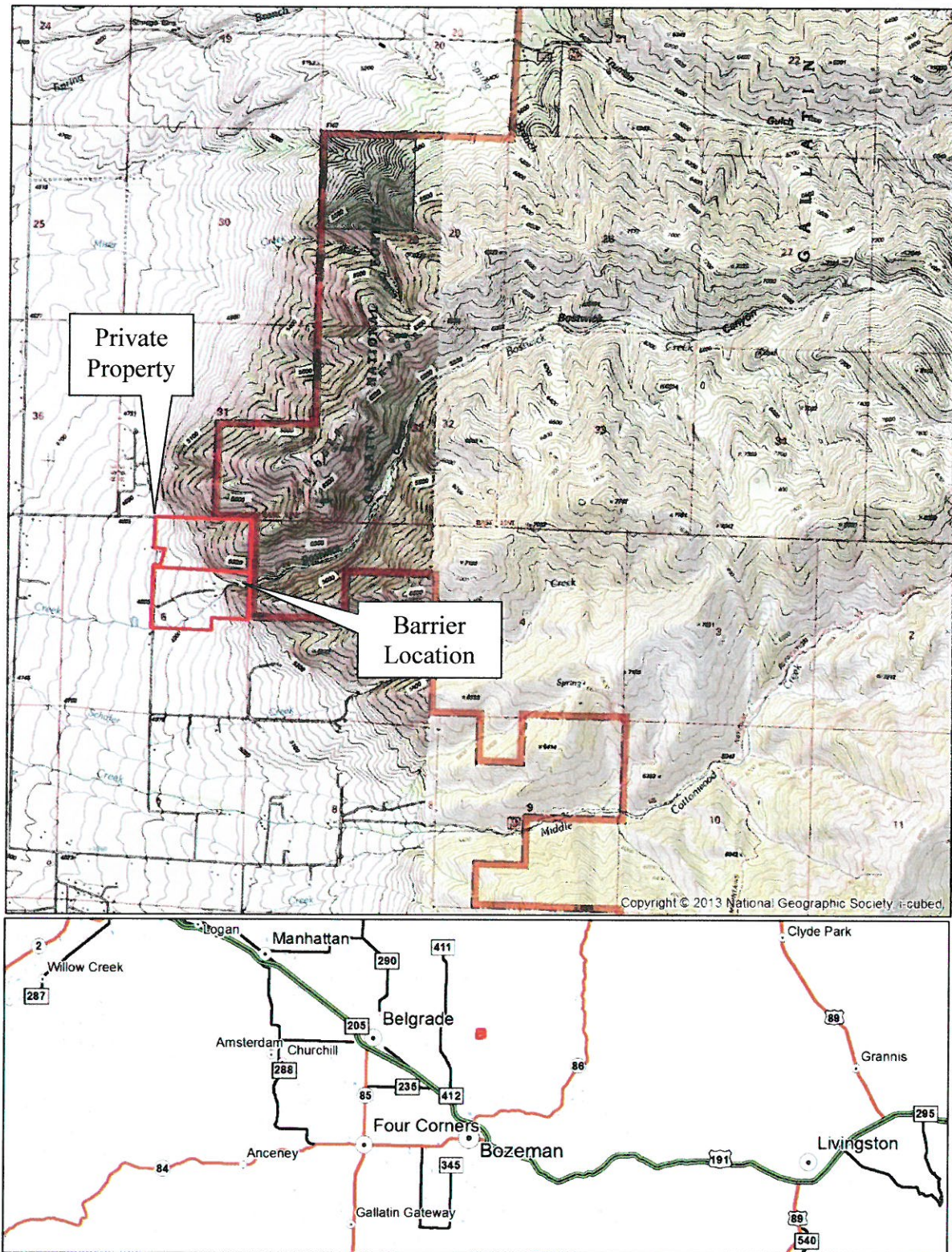


Figure 1. Site location and general vicinity, Bostwick Creek Fish Barrier

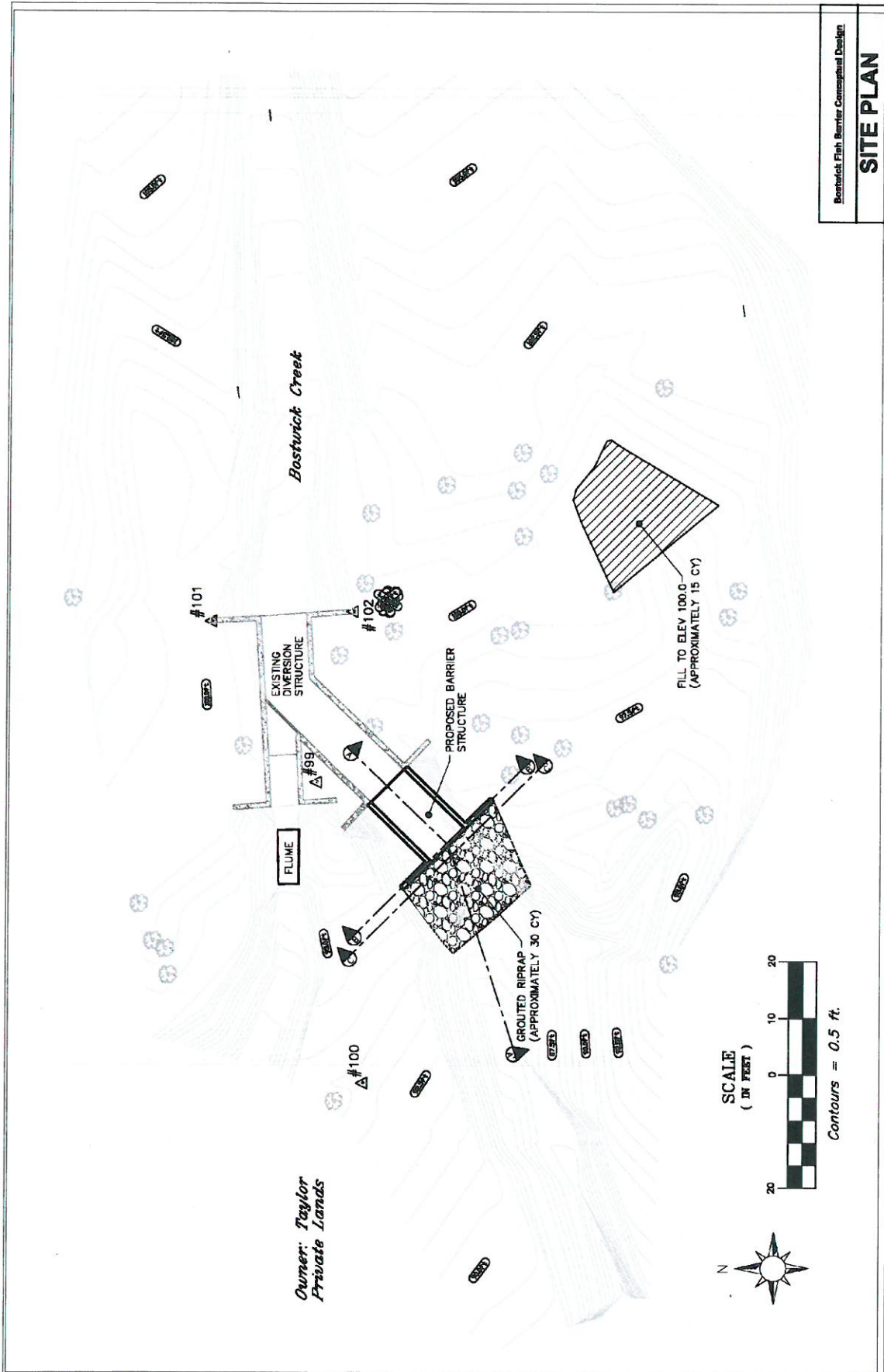


Figure 2. Site plan with existing diversion structure and proposed new construction

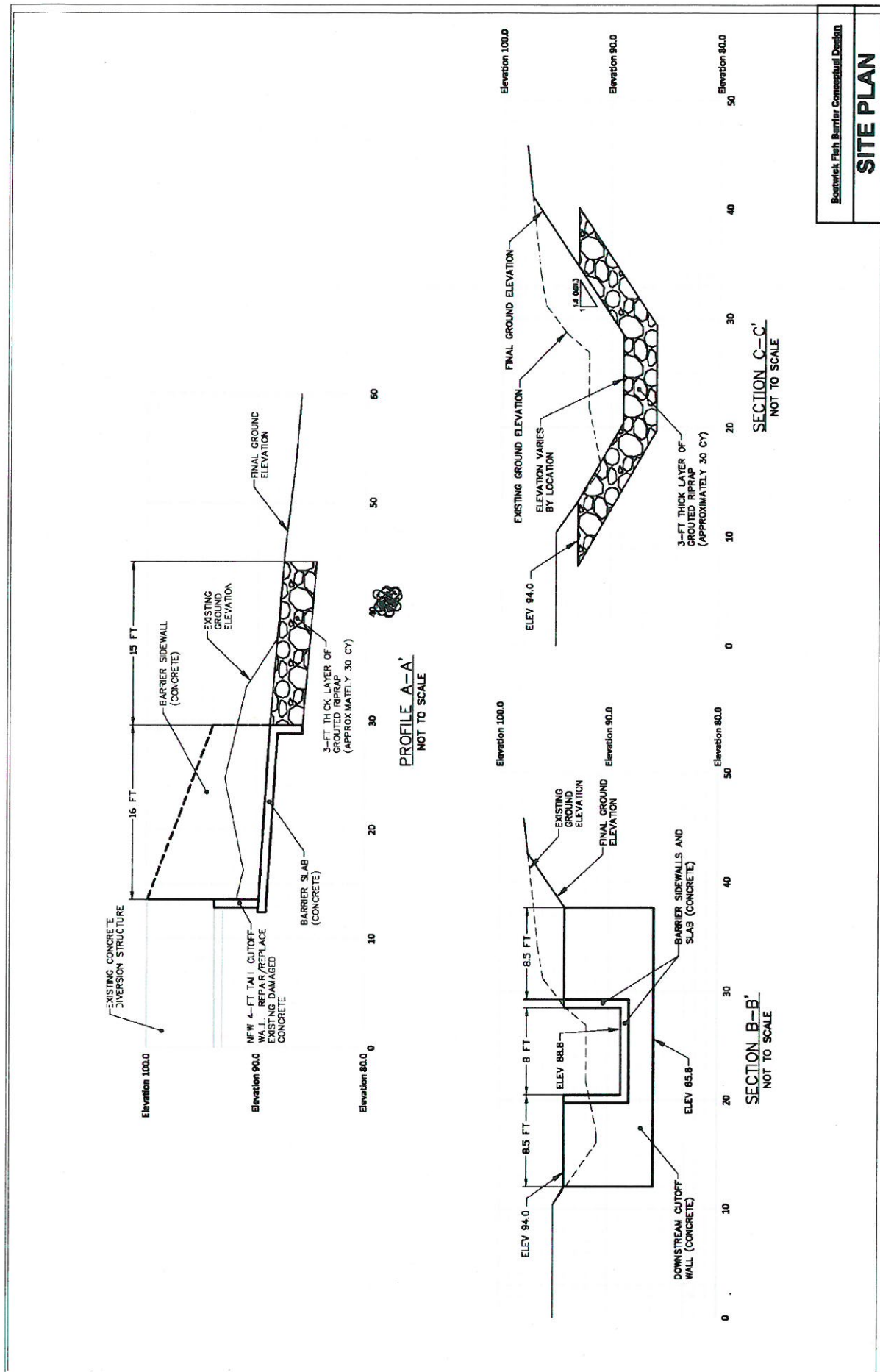


Figure 3. Section views of proposed barrier structure

LONGITUDINAL PROFILE (Flow)

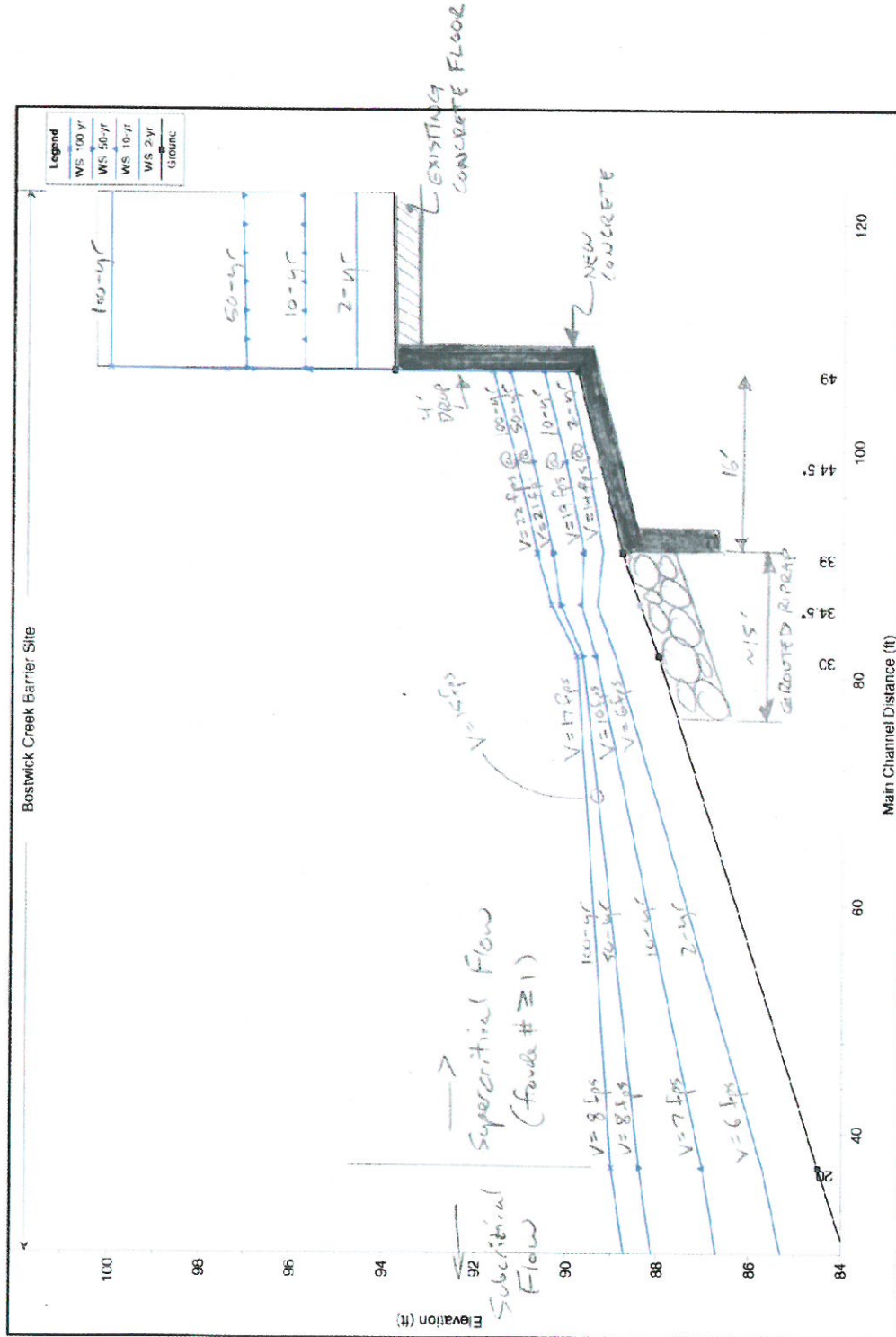


Figure 4. HEC-RAS analysis up to 100 year flow recurrence – USGS regression derived.

Bostwick Creek fish barrier
BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

Both tables must be completed or the application will be returned

WORK ITEMS (ITEMIZE BY CATEGORY)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	CONTRIBUTIONS			
					FUTURE FISHERIES REQUEST	IN-KIND SERVICES**	IN-KIND CASH	TOTAL
Personnel								
Survey	1		\$1,863.78	\$ 1,863.78		1,863.78		\$ 1,863.78
Design	1		\$1,863.78	\$ 1,863.78		1,863.78		\$ 1,863.78
Engineering				\$ 5,000.00			5,000.00	\$ 5,000.00
Permitting				\$ -				\$ -
Oversight				\$ 14,000.00			14,000.00	\$ 14,000.00
Labor				\$ -				\$ -
			Sub-Total	\$ 22,727.55	\$ -	\$ 3,727.55	\$ 19,000.00	\$ 22,727.55
Travel								
Mileage				\$ -				\$ -
Per diem				\$ -				\$ -
			Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -
Construction Materials***								
Excavation	140	CY	\$33.00	\$ 4,620.00	4,620.00			\$ 4,620.00
Compacted Backfill	140	CY	\$66.00	\$ 9,240.00	9,240.00			\$ 9,240.00
Grouted Rip-Rap	40	CY	\$110.00	\$ 4,400.00	4,400.00			\$ 4,400.00
Compacted Bedding	10	CY	\$66.00	\$ 660.00	660.00			\$ 660.00
Steel Reinforced Concrete	25	CY	\$1,100.00	\$ 27,500.00	27,500.00			\$ 27,500.00
Erosion Control	1	LS		\$ 1,100.00	1,100.00			\$ 1,100.00
Water Management	1	LS		\$ 4,400.00	4,400.00			\$ 4,400.00
Clearing and Grubbing	1	LS		\$ 1,100.00	1,100.00			\$ 1,100.00
Repair Damaged Concrete, Existing Structure	1	LS		\$ 3,300.00	3,300.00			\$ 3,300.00
Access, Rehab, Stockpiling	1	LS		\$ 2,200.00	2,200.00			\$ 2,200.00
			Sub-Total	\$ 58,520.00	\$ 58,520.00	\$ -	\$ -	\$ 58,520.00
Equipment								
				\$ -				\$ -

Bostwick Creek fish barrier
BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -
Mobilization								
				\$ 12,084.00			12,084.00	\$ 12,084.00
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ 12,084.00	\$ -	\$ -	\$ 12,084.00	\$ 12,084.00
TOTALS				\$ 93,331.55	\$ 58,520.00	\$ 3,727.55	\$ 31,084.00	\$ 93,331.55

*Units = feet, hours, inches, lump sum, etc.

**Can include in-kind materials. Justification for in-kind labor (e.g. hourly rates used for calculations). Describe here or in text.

***The Future Fisheries Review Panel recommends a maximum fencing cost of \$1.50 per foot

MATCHING CONTRIBUTIONS (do not include requested funds)

CONTRIBUTOR	IN-KIND SERVICE	IN-KIND CASH	TOTAL	Verified? (Y/N)
MFWP	\$ -	\$ 5,000.00	\$ 5,000.00	N
One Fly Foundation	\$ -	\$ -	\$ 26,083.45	N
USFS	\$ 3,727.55	\$ -	\$ 3,727.55	Y
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTALS	\$ 3,727.55	\$ 5,000.00	\$ 34,811.00	